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## **FACILITATION SERVICES FOR THE JOINT STAFF**

**by**

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Dr. G.W. Frank  
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**SEPTEMBER 1996**

**OTTAWA, CANADA**



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DEPARTMENT OF NATIONAL DEFENCE  
CANADA

OPERATIONAL RESEARCH DIVISION  
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OTTAWA, ONTARIO

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## **ABSTRACT**

The Joint Staff Operational Research Team (JSORT) provides immediate and independent advice to assist the Joint Staff plan and execute Canadian Forces International Operations. One of the services that the JSORT can provide is facilitation. The JSORT staff has training and experience in a number of facilitation techniques that improve the efficiency and effectiveness of team problem solving. These techniques can be used to avoid confrontation on controversial issues or improve creativity on difficult problems. The following paper describes how some of our facilitation techniques have been applied to Option Analysis in J3 Plans.

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## **FACILITATION SERVICES FOR THE JOINT STAFF**

### **INTRODUCTION**

1. The mission of the Joint Staff Operational Research Team (JSORT) is to provide the Joint Staff with immediate and independent analysis and advice to support the planning and execution of Canadian Forces International Operations. As civilian scientists, we pride ourselves in our ability to maintain objectivity. In this regard, we can be called on to facilitate team problem solving sessions for Joint Staff Officers on controversial issues and have developed a number of methods to avoid unnecessary confrontation among the team members. Some of these methods have been described in previously published papers (Ref. 1,2 and 3). Some, like computer assisted meetings (Ref. 4), are still under development.
2. The following paper will describe our recent experience facilitating team problem solving sessions for J3 Plans Staff on Operation Griffon, the Strategic Movement Assessment Study and Operation Standard follow-on.

### **STRUCTURED BRAINSTORMING**

3. The JSORT has been working with a methodology for structured brainstorming which is referred to in the literature as the Nominal Group Technique (Ref. 1). This methodology focuses on a problem and attempts to generate as many potential solutions as possible in the time available. There is very little evaluation of the solutions generated in this process. However, an anonymous vote can be taken at the end of the process to establish priorities for further analysis.

4. The process involves four steps:
  - a. discussion of the problem statement;
  - b. silent idea generation by participants;

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- c. round-robin recording of the solutions on a flip chart; and
- d. grouping of the ideas around concepts.

There is an optional fifth step which would involve an anonymous vote which helps to obtain consensus and closure on the session.

5. We have found that this process works best when the team members are at the same working level and believe in an egalitarian approach. The solutions generated would be prioritized and passed to "the boss" for decision or amendment. Or the best solutions might be evaluated in more detail by a smaller group using one of the other facilitation techniques such as Benefits, Costs and Risks (Ref. 5).

6. This technique has been used by a Working Group on the Operation Griffon (Ref. 6), to identify issues and risks in the follow-on of Operation Standard (Ref. 7), and by the Strategic Movement Assessment Study Team (Ref. 9).

### **BENEFITS, COSTS AND RISKS**

7. Reference 5 describes a methodology referred to in the literature as Multi-Criteria Decision Making. This is intended for detailed evaluation of a short list of options by a small group of analysts (two or three officers). The benefits, costs and risks are specified as criteria and prioritized on a 0-10 scale. The options are evaluated according to the criteria on a 0-10 scale. These evaluations are then normalized and summed to provide a rating of the relative value of each option in terms of their benefits, costs and risks.

8. This technique provides the detail from which a thorough option analysis paper can be written. It was used by the Operation Griffon Working Group to evaluate various options for the deployment of weapons during humanitarian operations (Ref. 8). It was also used extensively to evaluate the options during the Strategic Movement Assessment (Ref. 9).

## **PROS AND CONS ANALYSIS**

9. We have developed a version of Pros and Cons analysis based on a technique called The Six Thinking Hats described by Edward de Bono in Reference 10. In this technique, the Pros and then the Cons of each option are examined by a team. This process utilizes "parallel thinking" which avoids confrontation and enhances creativity. The process also allows a round-table discussion of the "gut feelings" of the team members concerning the options. This provides a sense of closure to the session. An optional step is to allow time for the creative solution of the problems identified in the Cons.

10. This process was first used in the brainstorming analysis of the follow-on options for Haiti at a Mini-JSAT (Ref. 11). It was also used to cut the long list to a short list in the Strategic Movement Assessment Study (Ref. 9).

## **COMMITTEE DECISION SUPPORT PROGRAM**

11. Mr. Ed Emond, of the Operational Research Division, has developed a computer program called the Committee Decision Support Program (CDSP) which can assist a team determine if there is a statistically significant amount of consensus on the ranking of alternative courses of action (Ref. 12). This program was first demonstrated to members of J3 Plans in the Strategic Movement Assessment Study (Ref. 9).

## **OTHER TECHNIQUES BEING DEVELOPED**

12. Probably the most interesting opportunity that has arisen is the possibility of computer assisted group decision making. We have been in contact with Ms. Ann Burns (Ref. 4) who is responsible for the NDHQ computer network for group decision making and we have volunteered to assist in facilitation in NDHQ using this tool. A room will be allocated in the MGen Pearkes Building, on the fifth floor South Tower to house the computers and Ms. Burns will train the JSORT on the equipment.

13. The group decision making system is portable and consists of a network of 16 notebook PC's and Group Systems software developed by Ventura Corporation. A similar system is installed at Canadian Forces Base Kingston and also at Queen's University in Kingston.

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14. Mr. Taylor has studied the techniques developed by Dr. Edward de Bono called Lateral Thinking (Ref. 13) which can be employed on very difficult problems in which normal brainstorming has not produced adequate results. The authors have also received training on The Six Thinking Hats Technique (Ref. 10) developed by Dr. de Bono.

15. Dr. Frank has recently taken a course on facilitation from Treasury Board (Ref. 14) and on Effective Group Decision Making from Training and Development Canada (Ref. 15). Mr. Taylor has recently taken a course through Training and Development Canada on Group Problem Solving (Ref. 16).

## **CONCLUDING REMARKS**

16. The JSORT provides a unique service to the Joint Staff through its skills in facilitation and group problem solving. We specialize in the application of the scientific method to military operations and have developed a number of useful and accessible analytical tools for decision support. Our goal is to provide a value-added service to the Joint Staff by ensuring that the teams conducting the staff analysis are provided with the latest tools and techniques for group problem solving and decision making. If we can reduce the number of iterations in the decision making process by empowering the teams of Officers involved with tools that can support their analysis, we will have achieved our goal.

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16. Notes from Course T501 on Problem Solving; presented by Training and Development Canada; November 1996.



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